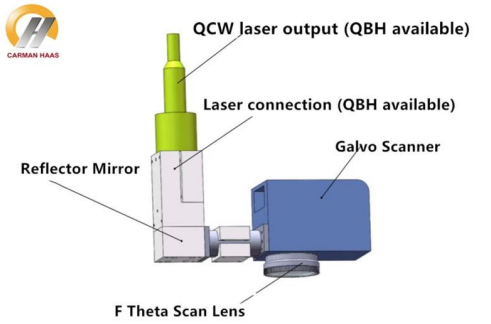
Product Information

Product Description:

Carmanhaas could offer complete laser cleaning optical lens and system solution. Including QBH Module, Galvo Scanner, F-theta Scan lenses and Control System. **China customized Galvo Laser Head Suppliers**,We are focus on high end industrial laser application.
Our Galvo Scanner standard model is PSH10, PSH14, PSH20 and PSH30.
PSH10 version- for high end industrial laser applications, such as precision marking, processing-on-the-fly, cleaning, welding, tuning, scribing, additive manufacturing (3D printing) , microstructuring, material processing, etc.
PSH14-H high power version- for laser power ranging from 200W to 1KW(CW); fully sealed scan head with water cooling; suitable for high laser power, dusted, or environmentally challenging occasions, e.g. additive manufacturing(3D printing), precise welding, etc.
PSH20-H high power version- for laser power ranging from 300W to 3KW(CW); fully sealed scan head with water cooling; suitable for high laser power, dusted, or environmentally challenging occasions, e.g. additive manufacturing(3D printing), precise welding, etc.
PSH30-H high power version- for laser power ranging from 2KW to 6KW(CW); fully sealed scan head with water cooling; suitable for super high laser power, extremely low drift occasions. E.g. laser welding.(**galvo scanner wholesales china**)

Key Advantages:

1.Extremely low temperature drift (≤3urad/℃); Over 8 hours Long-Term Offset Drift ≤30 urad
2.Extremely high resolution and repeatability; resolution≤1 urad; repeatability≤ 2 urad
3.Super high speed:
PSH10: 17m/s
PSH14: 15m/s
PSH20: 12m/s
PSH30: 9m/s


CARMAN HAAS
QCW laser output (QBH available)
Laser connection (QBH available)
Galvo Scanner
Reflector Mirror
F Theta Scan Lens

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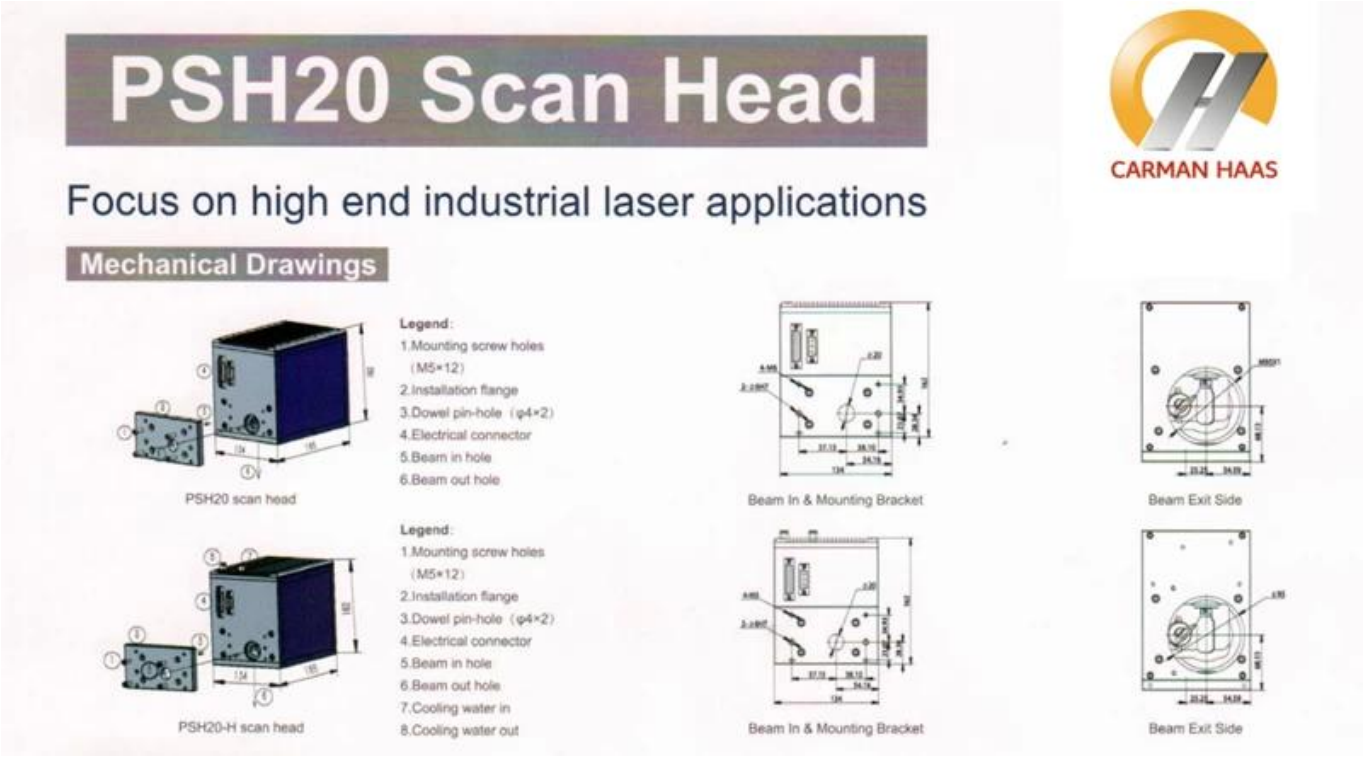
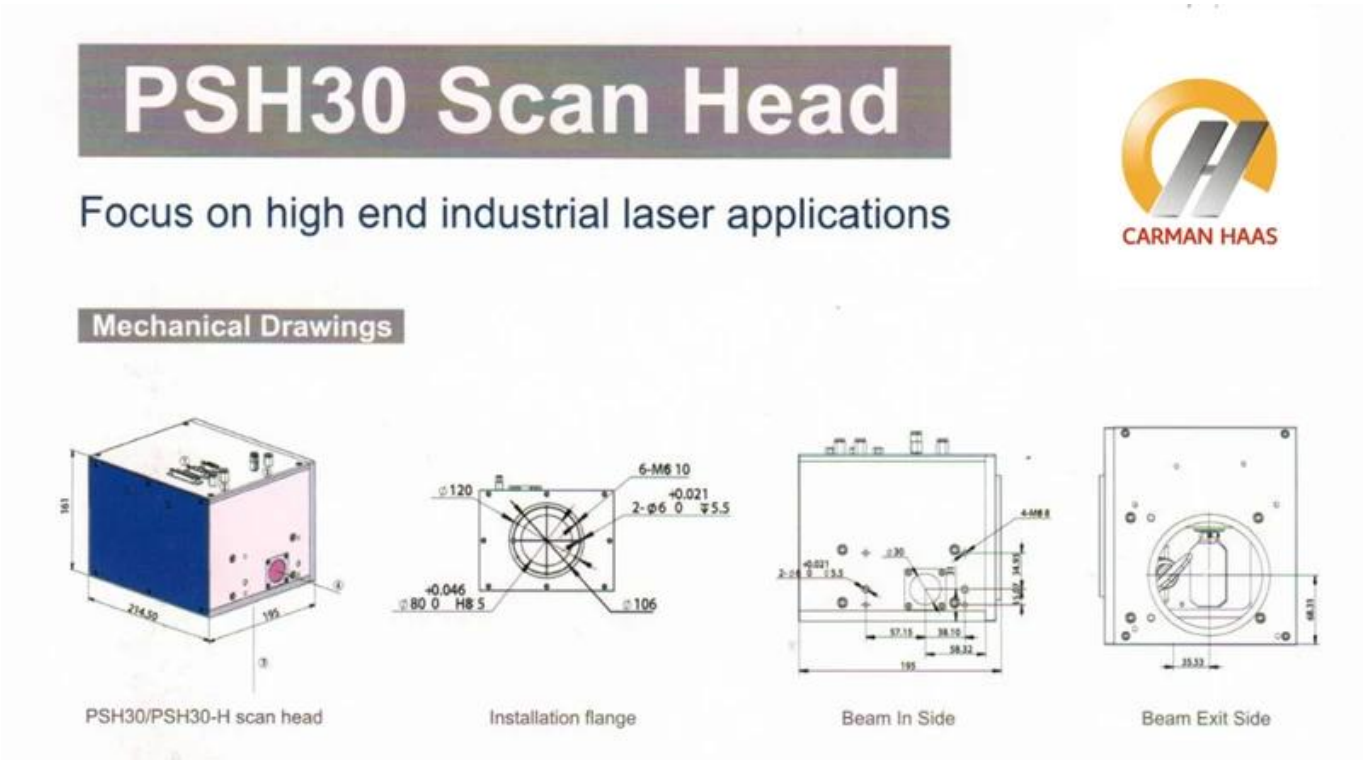
Technical Parameters:

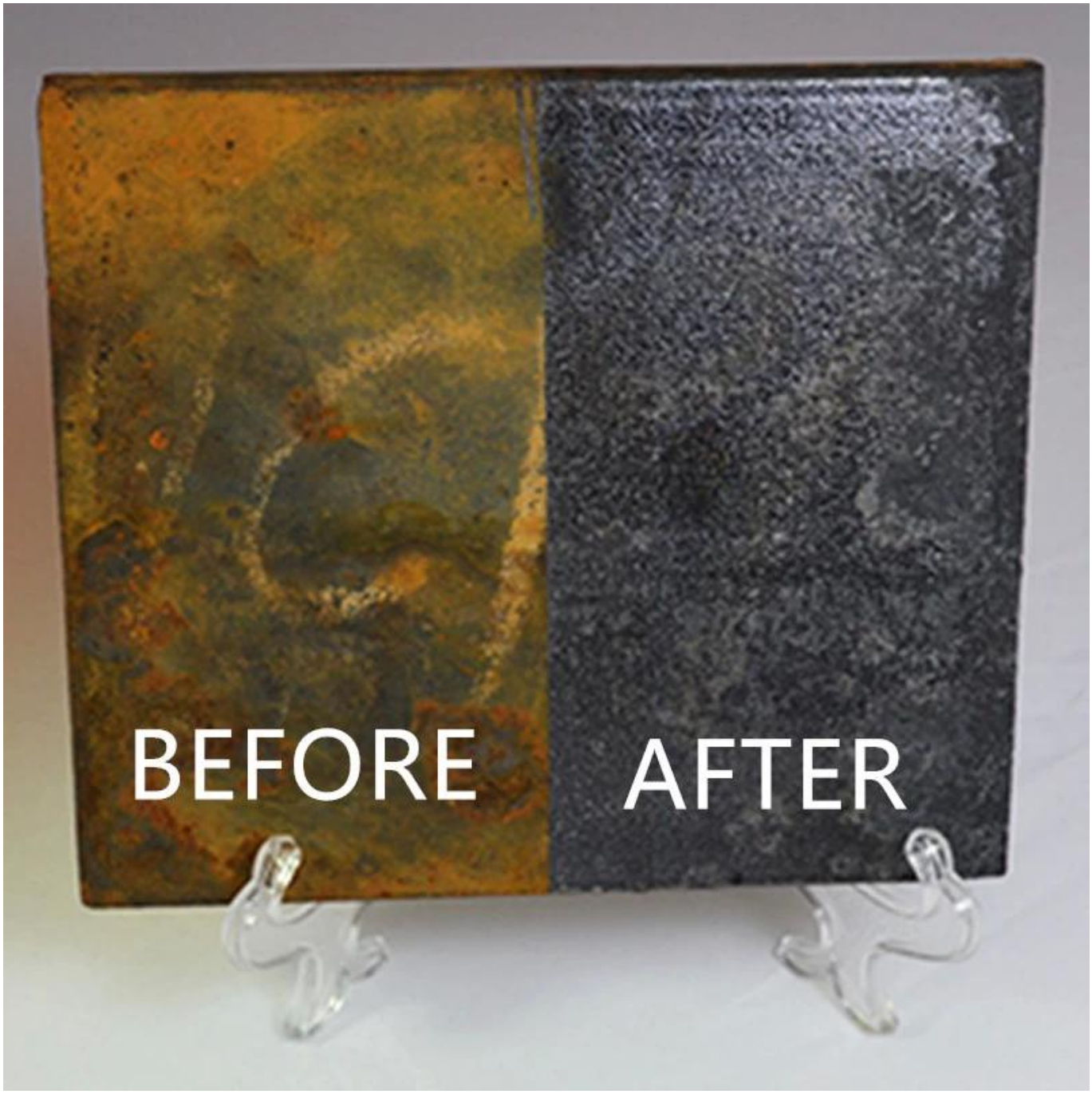
Model	PSH10	PSH14-H	PSH20-H	PSH30-H
Input laser power (MAX.)	CW: 1000W @ fiber laser Pulsed: 150W @ fiber laser	CW: 1000W @ fiber laser Pulsed: 500W @ fiber laser	CW: 3000W @ fiber laser Pulsed: 1500W @ fiber laser	CW: 1000W @ fiber laser Pulsed: 150W @ fiber laser
Water cool/sealed scan head	NO	yes	yes	yes
Aperture (mm)	10	14	20	30
Effective Scan Angle	±10°	±10°	±10°	±10°
Tracking Error	0.13 ms	0.19 ms	0.28ms	0.45ms
Step Response Time(1% of full scale)	≤ 0.27 ms	≤ 0.4 ms	≤ 0.6 ms	≤ 0.9 ms
Typical Speed				
Positioning / jump	< 157 m/s	< 15 m/s	< 12 m/s	< 9 m/s
Line scanning/raster scanning	< 12 m/s	< 10 m/s	< 7 m/s	< 4 m/s
Typical vector scanning	< 5 m/s	< 4 m/s	< 3 m/s	< 2 m/s
Good Writing quality	900 cps	700 cps	450 cps	260 cps
High writing quality	700 cps	550 cps	320 cps	180 cps
Precision				
Linearity	99.9%	99.9%	99.9%	99.9%
Resolution	≤ 1 urad	≤ 1 urad	≤ 1 urad	≤ 1 urad
Repeatability	≤ 2 urad	≤ 2 urad	≤ 2 urad	≤ 2 urad
Temperature Drift				
Offset Drift	≤ 3 urad/℃	≤ 3 urad/℃	≤ 3 urad/℃	≤ 3 urad/℃
Qver 8hours Long-Term Offset Drift （After 15min warn-up）	≤ 30 urad	≤ 30 urad	≤ 30 urad	≤ 30 urad
Operating Temperature Range	25℃±10℃	25℃±10℃	25℃±10℃	25℃±10℃
Signal Interface	Analog: ±10V Digital: XY2-100 protocol	Analog: ±10V Digital: XY2-100 protocol	Analog: ±10V Digital: XY2-100 protocol	Analog: ±10V Digital: XY2-100 protocol
Input Power Requirement (DC)	±15V@ 4A Max RMS	±15V@ 4A Max RMS	±15V@ 4A Max RMS	±15V@ 4A Max RMS

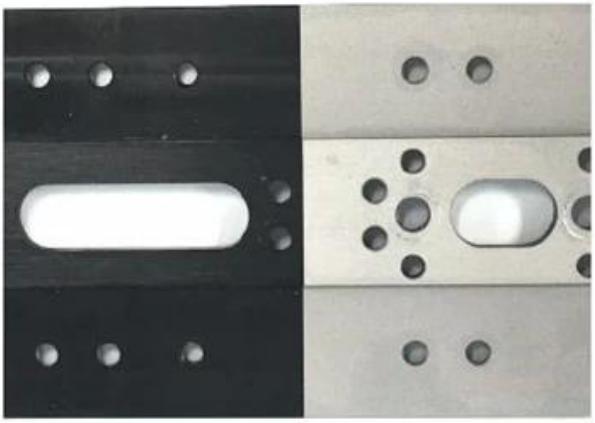
Note:
(1)All angles are in mechanical degrees.
(2)With F-Theta objective f=163mm. Speed value varies correspondingly with different focal lengths.
(3)Single-stroke font with 1mm height.

Mechanical Dimensions(mm):






BEFORE
AFTER



BEFORE AFTER

BEFORE AFTER

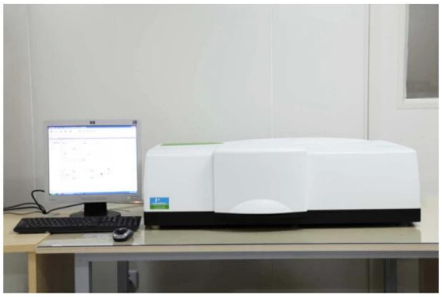
BEFORE AFTER

BEFORE AFTER

Factory

TRIOPTICS OptiSpheric 2000 AF

---Testing EFL、R、Centering Error、Wedge Angle、BFL、MTF



PerkinElmer Lambda 950---Testing Transmission and Reflectivity

Carmanhaas Coating Machine

Certificate&Exhibition

CERTIFICATE

ATTESTATION
CERTIFICATE OF MACHINERY AND LOW VOLTAGE DIRECTIVES

Technical file of the company mentioned below has been observed and audit has been completed successfully. 2006/42/EC Machinery Directive and 2014/ 35/EU Low Voltage Directive have been taken as references for these processes

Company Name	: **Carman HAAS Laser Technology (Suzhou) Co., Ltd.**
Company Address	: No 155, West Road Suhong, Suzhou Industrial Park, Suzhou City, Jiangsu , P.R.China
Related Directives and Annex	: **Low Voltage Directive 2014/35/EU** **Machinery Directive 2006/42/EC**
Related Standards	: **EN ISO 12100:2010; EN 60204-1:2006+A1:2009+AC:2010**
Product Name	: **Laser Marking Machine**
Report No and Date	: SD-90049717;09.08.2018
Product Brand/Model/Type	: LMCH-3W,LMCH-5W,LMCH-10W,LMCH-15W,LMCH-20W,LMCH-25W, LMCH-30W,LMCH-50W,LMCH-60W,LMCH-70W,LMCH-100W, LMCH-120W,LMCH-150W,LMCH-200W,LMCH-300W,LMCH-500W

Certificate Number	: **M.2018.201.N6073**
Initial Assessment Date	: 10.08.2018
Registration Date	: 13.08.2018
Reissue Date/No	:
Expiry Date	: **12.08.2023**

UDEM International Certification Auditing Training Centre Industry and Trade Inc. Co.

The validity of the certificate can be checked through www.udem.com.tr. The CE mark shown on the right can only be used under the responsibility of the manufacturer with the completion of EC Declaration of Conformity for all the relevant Directives. This certificate remains the property of UDEM International Certification Auditing Training Centre Industry and Trade Inc. Co. to whom it must be returned upon request. The above named firm must keep a copy of this certificate for 15 years from the registration of certificate. This certificate only covers the product(s) stated above and UDEM must be noticed in case of any changes on the product(s)

Address: Mutlukent Mahallesi 2073 Sokak (Eski 93 Sokak) No:10 Çankaya - Ankara - TURKEY
Phone: +90 0312 443 03 90 **Fax:** +90 0312 443 03 76
E-mail: info@udemltd.com.tr www.udem.com.tr

ISO 9001

Certificate of Approval

Certificate No.: 10119Q12565R0M

Awarded to

Carman Haas Laser Technology(SuZhou) Co., Ltd.

Organization Code Certificate No. / Unified Social Credit Code:91320594MA1MF4EP56
Add.:No.155, West Road Suhong, Suzhou Industrial Park, Suzhou City, Jiangsu Province, P.R. China. 215000

Beijing ZhongLianTianRun Certification Center (ZLTR) certify that the Quality Management System of the above organization has been assessed and found to be in accordance with the requirements of the standard:

GB/T19001-2016 / ISO9001:2015

SCOPE OF CERTIFICATION/REGISTRATION

The Research and Development and Production of Optics Lenses (Except the limits of national laws and regulations.)

This certificate is made valid when used with certification scopes and the requirements of applicable laws and regulations. These requirements include, but are not limited to, administrative permits, scopes of qualifications, and CCC requirements.
Subject to operation conditions in requirements conformity with Quality Management System, This Certificate is valid for a period of three years only,
Date from: Mar 13th,2019 To: Mar 12th,2022
The effectiveness of this Certificate shall be Validated by periodic surveillance audit of ZLTR for maintenance.
Information of this certificate can be found on the official website of Beijing Zhonglian Tianrun Certification center (http://www.zltr.com.cn)

SCC Accredited CB-MS
OCSM Accredited CCN
Accredited CB-MS (Certification Body - Management Systems)

MEMBER OF MULTILATERAL RECOGNITION ARRANGEMENT IAF

Beijing Zhongliantianrun Certification Center ISSUED BY

Beijing Zhongliantianrun Certification Center
Room2603, 22nd Floor, 2nd Unit, Block 1, No.4 Yard, Qiyang Road, Chaoyang District, Beijing, P.R. China 100102
Information of this certificate can be found on the official website of Certification and Accreditation Administration of the People's Republic of China (http://www.cnca.gov.cn)

Packing List

Return Policy:

Should returns be required:

Step 1) Contact us with this website email.
Step 2) Provide as much detail as possible about the problem you are having.
Step 3) Authorization to return the item will be issued.
Step 4) Return the item for the agreed replacement or refund.

Logistics:

(1)For Laser Optics order delivery,can be optional with DHL,UPS,FedEx,TNT,EMS,ets

(2)For Laser machine order delivery,can be optional with terms of EXWork FOB,CNF,CIF By Air or by Sea based on the buyer's forwarders or ours.

FAQ

Q1.Are you a manufacturer?

A1: Yes, we are professional and experienced manufacturer with our own molds and production lines.

Q2.How about quality of products?

A2: Our technicians and QC teams test the products one by one using aging line, professional devices and instruments to ensure the quality for all products.

Q3.How about price?

A3: We are a manufacturer and always offer our customers the most competitive prices.

Q4.How to place an order?

A4: Contact with online service, or sent email to us directly, we will reply to you with product price, specifications, packing etc. soon. Thank you.

Q5.May I send material to test marking performance?

A5: Yes! You are welcome to send material to test our superior quality and service.

Q6.Can I visit your factory?

A6: Yes, welcome to visit our factory at your convenient time.

Q7.How can I make OEM or ODM orders?

A7: We have different print processing for different OEM/ODM orders. Please contact us with online service or send email to us directly.

Q8. How should I pay for my orders?

A8: You can pay by T/T would be available for qualified bank and MOQ required for each order.